

Abstract of the Disclosure

A diagnostic apparatus and method for a fuel system that supplies fuel to an internal combustion engine. The fuel system includes a fuel tank that has a headspace and a filler occluded by a removable cap, a charcoal canister in fluid communication with the headspace, and an integrated pressure management apparatus. The integrated pressure management apparatus has a pressure operable device and a switch that signals displacement of the pressure operable device in response to negative pressure at a first pressure level in the charcoal canister. The diagnostic apparatus comprises a pressure source, a first fitting adapted to be occluded by the removable cap, a second fitting adapted to sealingly engage the filler, an orifice in fluid communication with the pressure source, with the first fitting, and with the second fitting, and a first valve controlling the fluid communication with the orifice. The first fitting is in fluid communication with the pressure source, and the second fitting is in fluid communication with the pressure source and with the first fitting.